

of the four sides of the side skirt 906. Also, as described above, in some embodiments, the cover can receive more than one peripheral.

[0211] In addition to the male plug 916, the cover 900 includes a peripheral plug 917. The peripheral plug 917 fits into the input/output socket of the peripheral device. The peripheral plug 917 may be designed for a particular peripheral device or may be suitable for multiple different devices.

[0212] FIGS. 57A and 57B illustrate one embodiment of a portion of an adapter 914 that includes both the male plug 916 and the peripheral plug 917, as well as a body 928, electrical contacts 922, magnets 978 (or ferromagnetic members), and a body 928. The electrical contacts 922 and magnets 978 are attached to the body and the male plug 916 is coupled to the body with the conductors that couple the male plug 916 to the electrical contacts 922 passing through the body.

[0213] The adapter 914 also includes a bridge 929 which is attached to the body 928. The bridge 929 contains a carrier 931 upon which the conductors (e.g., wires, conductive traces, or the like) that couple the electrical connectors of the peripheral plug 917 to the electrical contacts 922. In some embodiments, the conductors of the bridge 929 are attached directly to portions of the electrical contacts 922 that are exposed through the body 928 or the conductors can be coupled to the electrical contacts 922 through conductive vias, wires, or traces that pass through the body 928. In at least some embodiments, the carrier 931 is at least 0.4 mm thick in order to withstand the high pressure injection molding of the shell 902 of the cover 900. Thinner carriers may break apart during the injection molding process. The peripheral plug 917 includes one or more electrical connectors that connect to contacts within the peripheral device. This arrangement can be used to provide power to the peripheral device via the adapter 914. In at least some embodiments, the adapter 914 and associated conductors can be arranged so that the peripheral device provides power, data, or both to the portable electronic device through the adapter 914. In at least some embodiments, the male plug 916 and the peripheral plug 917 can both include a sealed housing 975, 977 as described above to prevent or reduce inflow of plastic material to the high injection molding process for forming the shell 902 of the cover 901 as described above.

[0214] While the preferred and additional alternative embodiments of the invention have been illustrated and described, it will be appreciated that various changes can be made therein without departing from the spirit and scope of the invention. Therefore, it will be appreciated that various changes can be made therein without departing from the spirit and scope of the invention. Accordingly, the inventor makes the following claims.

What is claimed is:

1. A protective arrangement for an electronic device, the protective arrangement comprising:

a removable cover comprising a panel and a skirt that meets edges of the panel, the removable cover comprising an exterior surface and an adapter opening through the exterior surface, wherein the panel and the skirt form an interior cavity therebetween, and the skirt forming a mouth opening that communicates with the interior cavity, wherein the interior cavity is configured and arranged to receive an electronic device;

an adapter comprising a male plug extending into the interior cavity of the removable cover in an arrangement for mating with a female socket of the electronic device and a contactor opposite the male plug and configured for exposure through the adapter opening in the exterior surface of the removable cover, the male plug comprising a plurality of connectors for mating with connectors in the female socket of the electronic device, the contactor comprising a surface recessed relative to the exterior surface of the removable cover and a plurality of electrical contacts arranged in at least two rows on the surface and configured for exposure through the adapter opening of the removable cover, wherein the electrical contacts are electrically coupled to one or more of the connectors of the male plug.

2. The protective arrangement of claim 1, wherein the removable cover is configured to cover at least a portion of a back face of the electronic device with the panel, at least partially cover a plurality of side faces of the electronic device, and extend around a peripheral edge of a front face of the electronic device to secure the electronic device within the removable cover.

3. The protective arrangement of claim 1, wherein the electrical contacts of the contactor are circular.

4. The protective arrangement of claim 1, wherein the surface of the contactor extends laterally between opposing sides of the adapter opening in the exterior surface of the removable cover.

5. The protective arrangement of claim 1, the removable cover defines a dam around a perimeter of an exposed portion of the surface of the contactor.

6. The protective arrangement of claim 5, wherein the surface of the contactor is recessed relative to the dam.

7. The protective arrangement of claim 1, wherein the removable cover comprises a flexible shell.

8. The protective arrangement of claim 7, wherein the removable cover further comprises a hard shell disposed at least partially over the flexible shell or disposed at least partially within the flexible shell.

9. The protective arrangement of claim 1, wherein the adapter is coupled, or coupleable, to the removable cover.

10. A docking system, comprising:

the protective arrangement of claim 1; and

a docking connector comprising a plurality of contacts arranged to connect with a plurality of the electrical contacts of the contactor.

11. The docking system of claim 10, wherein the plurality of contacts of the docking connector are biasing contacts.

12. The docking system of claim 10, wherein the plurality of contacts of the docking connector are spring-loaded pogo pins.

13. A protective arrangement for an electronic device, the protective arrangement comprising:

a removable cover comprising a panel and a skirt that meets edges of the panel, the panel comprising an exterior surface and an adapter opening through the exterior surface, wherein the panel and the skirt form an interior cavity therebetween, and the skirt forming a mouth opening that communicates with the interior cavity, wherein the interior cavity is configured and arranged to receive an electronic device;

an adapter comprising a male plug extending into the interior cavity of the removable cover in an arrangement for mating with a female socket of the electronic